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10/596,111	03/06/2007	Rolf Neumann	PHDE030400US	2170

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EXAMINER	
RAJAN, KAI	
ART UNIT	**PAPER NUMBER**
3769	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/596,111	NEUMANN, ROLF	
	Examiner	Art Unit	
	Kai Rajan	3769	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 November 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2,4,6-14,16,17 and 19-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2,4,6-14,16,17 and 19-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Examiner acknowledges the amendment filed November 16, 2009.

Status of the Application

Applicant requested a refund of the RCE fees paid May 29, 2009, in response to a note in Examiner's Response to Arguments of November 16, 2009. The note stated that the finality of the Office Action mailed December 4, 2008 was to be withdrawn. This note was inadvertently copied from the supplemental final rejection of March 9, 2009 and included in the Office Action of November 16, 2009. The Final Rejection of March 9, 2009 and Advisory Action of May 7, 2009 were proper. As such, the RCE was appropriately filed, and no refund is due.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

Claim 14 is objected to because of the following informalities: In the second line of claim 14, Applicant recites "wherein *the the* measuring apparatus. . ." Appropriate correction is required.

Claims 6 – 11, 13, 14, 16, 17, and 20 are objected to because of the following informalities: The claims use the term "signal" in two different contexts throughout the claims,

the first context identifying the physiological data stream, the second context being the identification provided to the user. The usage of the same term with two meanings in the claims confusing, and the Examiner suggests using different terms, such as replacing "signals the quality of the signal" with "indicates the quality of the signal." Such a change would not depart from the concept of the invention or change the scope of the claims, yet would bring clarity to the claim language-.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2,4,6-14,16,17 and 19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kianl et al. U.S. PGPub No. 2002/0161291 A1 ("Kianl").

2. The medical measuring system as claimed in claim 11, wherein the at least one mobile measuring apparatus includes at least one of an acoustic indicator and an optical indicator which signals the quality of the at least one physiological data measurement signal to a wearer of the mobile measuring apparatus (Kianl in at least paragraph 0068 and figure 6 discloses a signal strength bar, yet throughout the reference discusses audio alarms and visual representations of signal strength).

4. The medical measuring system as claimed in claim 2, wherein the optical indicator includes:

a light with a plurality of colors, each color being associated with a predetermined range of the at least one physiological data measurement signal quality to indicate when the quality of the at least one physiological data measurement signal is in each correspondingly predetermined range (Kianl paragraphs 0065 and 0068 disclose a pulsating bar with varying heights to indicate signal strength. Kianl fails to disclose a "light with a plurality of colors," yet it would have been obvious to one of ordinary skill in the art at the time of invention to substitute the indicator of Kianl with a "light with a plurality of colors." Various types of indicators such as colored lights are known in many arts. Since there is nothing of record disclosing the significance or advantage provided by a "light with a plurality of colors" over other types of indicators, the limitation is regarded as a design choice and nonessential to the functionality of the invention.

6. The medical measuring system as claimed in claim 11, wherein the at least one mobile measuring apparatus signals the quality of the at least one physiological data measurement signal automatically (Kianl paragraphs 0065, 0066, 0068, 0070, 0072, 0084, 0096, 0103 signal quality displayed while data is collected from the sensor).

7. The medical measuring system as claimed in claim 6, wherein the at least one mobile measuring apparatus signals the quality of the at least one physiological data measurement signal when the sensor is placed on another measuring site of a patient wearing the mobile measuring apparatus (Kianl paragraphs 0065, 0066, 0068, 0070, 0072, 0084, 0096, 0103 the signal quality

is displayed whenever the device is turned on, and thus shows the signal quality of data collected from any measuring site).

8. The medical measuring system as claimed in claim 11, wherein the at least one mobile measuring apparatus signals the quality of the at least one physiological data measurement signal in response to a substantial change in the quality of the at least one physiological data measurement signal (Kianl paragraphs 0065, 0066, 0068, 0070, 0072, 0084, 0096, 0103 alarms generated when signal quality falls below a threshold).

9. The medical measuring system as claimed in claim 11, wherein the at least one measuring apparatus signals the quality of the at least one physiological data measurement signal on demand (Kianl paragraphs 0065, 0066, 0068, 0070, 0072, 0084, 0096, 0103 signal quality displayed when the device is turned on).

10. The medical measuring system as claimed in claim 11, wherein the at least one mobile measuring apparatus evaluates the at least one physiological data measurement signal indicative of the physiological data to be communicated wirelessly and signals the quality of the at least one physiological data measurement signal in response to the quality of the at least one physiological data measurement signal indicative of the physiological data to be communicated wirelessly by the mobile measuring apparatus falling below a predetermined signal quality (Kianl paragraphs 0065, 0066, 0068, 0070, 0072, 0084, 0096, 0103 alarms generated when signal quality falls below a threshold).

11. A medical measuring system comprising:

a data device including a display screen for displaying at least one of medical measurement values and graphs (Kianl paragraphs 0037 – 0041 figure 1C standalone 105 connects to an internal display via interface cable 107);

at least one sensor which generates at least one physiological data measurement signal indicative of physiological data of a patient (Kianl paragraphs 0037 – 0041 standalone device receives pulse oximeter signals from sensors); and

at least one mobile measuring apparatus which (1) receives the at least one physiological data measurement signal from the at least one sensor (Kianl paragraphs 0037 – 0041 standalone device 105 receives pulse oximetry and other physiological data from sensors), (2) evaluates the at least one physiological data measurement signal to determine a quality of the at least one physiological data measurement signal and signals the quality of the at least one physiological data measurement signal generated by the at least one sensor (Kianl paragraphs 0065, 0066, 0068, 0070, 0072, 0084, 0096, 0103), and (3) communicates the at least one data measurement signal wirelessly to the data device (Kianl paragraphs 0037 – 0041 figure 1C standalone 105 connects to an internal display via interface cable 107).

Kianl discloses a wired connection between standalone device 105 and external monitor, shown in figure 1C and at least in paragraphs 0037 – 0041. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to make the wired connection of Kianl wireless, since wireless connections are well known in the art of data transfer between devices.

12. The medical measuring system as claimed in claim 11, wherein the at least one sensor includes a pulsoximeter, an ECG recorder or ultrasound measuring head (Kianl paragraphs 0037 – 0041 standalone device receives pulse oximeter signals from sensors).

Claim 13 is rejected on substantially the same basis as claim 11.

Claim 14 is rejected on substantially the same basis as claim 2.

Claim 16 is rejected on substantially the same basis as claim 11.

Claim 17 is rejected on substantially the same basis as claim 2.

Claim 19 is rejected on substantially the same basis as claim 11.

20. The medical measuring device of claim 16, wherein the quality is signaled in a manner which is humanly perceivable locally adjacent the medical measurement apparatus (Kianl in at least figure 1C shows measurement and display apparatus with signal strength indicators on the measurement device).

21. The medical measuring device of claim 16, wherein the determining means evaluates the measured medical data signals for one or more of a transmission level, an interference level,

and a signal form to determine the quality of the measured medical data (Kianl paragraphs 0065, 0066, 0068, 0072, 0073 data waveforms analyzed for signal strength by detection of motion artifacts and abnormal signal levels).

22. The medical measuring system of claim 13, wherein the measuring apparatus evaluates the measured physiological patient data signals based on at least one of a transmission level, an interference level, and a form of the physiological patient data signals from the one or more sensors (Kianl paragraphs 0065, 0066, 0068, 0072, 0073 data waveforms analyzed for signal strength by detection of motion artifacts and abnormal signal levels).

23. The medical measuring system as claimed in claim 11, wherein the mobile measuring apparatus communicates the physiological data to the data device and evaluates the at least one physiological data measurement signal for a change in a quality of the physiological data measurement (Kianl in at least paragraph 0058 discusses comparing collected data to limits to detect physiological alarm conditions).

24. The medical measuring system as claimed in claim 11, wherein the mobile measuring apparatus evaluates a signal form of the at least one physiological data measurement signal (Kianl paragraphs 0068, 0072, 0073 data waveforms analyzed for signal strength).

25. The medical measuring system as claimed in claim 11, wherein the mobile measuring apparatus evaluates the physiological data measurement signal based on an interference level

(Kianl paragraphs 0065, 0066, 0068, 0072, 0073 data waveforms analyzed for signal strength by detection of motion artifacts and abnormal signal levels).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Al-Ali U.S. Patent No. 6,850,788 B2;

Kiani – Azarbayjany et al. U.S. Patent No. 5,638,816; and

Craig, Jr. et al. U.S. Patent No. 4,869,253.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kai Rajan whose telephone number is (571)272-3077. The examiner can normally be reached on Monday - Friday 9:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Johnson can be reached on 571-272-4768. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kai Rajan/
Examiner, Art Unit 3769

/Henry M. Johnson, III/
Supervisory Patent Examiner, Art Unit 3769

March 26, 2010